

Appendix A - Signed Protocol

STILLMEADOW
INCORPORATED

PROTOCOL FOR STUDY 24069-20

Study Title: Product Chemistry
(OCSPP 830.6314 and 6316)

Test Substance: Behr Antibacterial Paint, #3190

Test Facility: STILLMEADOW, Inc.
12852 Park One Drive
Sugar Land, TX 77478-2521

Approved: Victor Li 09 Nov 20
Victor Li, MS Date
Study Director
STILLMEADOW, Inc.

Approved: Mark K. Gilbert 05 Nov 20
Management Date
STILLMEADOW, Inc.

Reviewed: Kristina Rodriguez 05 Nov 20
Kristina Rodriguez, ROAP-GLP Date
Director, Quality Assurance Unit
STILLMEADOW, Inc.

Sponsor: Behr Paint Company
1801 E. St. Andrew Place
Santa Ana, CA 92705
(714) 975-3127
gsarnecki@behr.com
jgilbert@behr.com

Approved: John Gilbert 11/6/2020
John Gilbert Date
Chief R&D Officer

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A. GENERAL

1. Study Title: Product Chemistry
2. Purpose: This study will determine physical and chemical characteristics of the test substance.
3. Methods Guidelines: This study will be conducted in accordance with Office of Chemical Safety and Pollution Prevention (OCSPP) Guidelines, Series 830 Sections: 6314 (oxidation/reduction) and 6316 (explosibility).
4. Regulatory Compliance:

This study will be conducted in compliance with Good Laboratory Practice Standards of EPA FIFRA, 40 CFR Part 160.

In the event of a Regulatory Inspection, regulatory inspectors will be provided with all study documentation requested. The Sponsor will be notified of the inspection of their study.

All methods can be found in STILLMEADOW, Inc. Standard Operating Procedures (SOPs).
5. Quality Assurance: The Quality Assurance Unit (QAU) will review the protocol. The study information will be entered into the Master Schedule. In-progress inspection(s) will be performed to ensure the integrity of the study. Any deviations from SOPs, the Protocol or Good Laboratory Practice Standards will be immediately reported to the Study Director and Management. The report and raw data will be audited and a statement prepared and signed that will specify the dates that the inspections were made and findings reported to Management and the Study Director.
6. Test Substance: Behr Antibacterial Paint, #3190. Test substance identification should include the name, lot/batch number and purity. The Sponsor should also provide information regarding safety, stability, storage conditions and disposal. The Sponsor assumes responsibility for purity, stability, identity, synthesis methods and location of documentation.
7. Proposed Schedule:

Proposed Experimental Start Date:	17 Nov 20
Proposed Experimental End Date:	15 Dec 20
8. Study Director: Victor Li, MS

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A. GENERAL (cont.)

9. Experimental Summary: The physical and chemical characteristics of the test substance will be determined by appropriate means, if applicable and if possible.
10. Protocol Amendments: Any change or alteration in the protocol will be justified, approved by the Study Director and recorded in writing
11. Sponsor Audits: The Sponsor may send an authorized representative to inspect the test system and/or data on the STILLMEADOW, Inc. premises during normal working hours.

B. EXPERIMENTAL DESIGN

1. Oxidation/Reduction: Chemical Incompatibility (830.6314)
- a. Nature of the Test Substance: Information on the oxidation or reduction potential of the test substance may be obtained through knowledge of the chemistry of the product or by application of the method described below and/or through another method determined by knowledge of the chemistry of the product.
- b. Test Method:
- i. Test Conditions: The tests will be conducted at the approximate temperatures expected during the normal use of the test substance. The actual test temperature will be recorded.
- ii. Method: The ratio of the mass of the test substance to the mass of the reactant will be sufficiently high to simulate maximum exposure situations. The test substance will be placed in contact with each of various reactants for 24 hours and all observations recorded. The temperature of the test substance will be recorded at least immediately before and 24 hours after the addition of the reactant and the difference calculated. Temperature increases of $>5^{\circ}\text{C}$ will be considered significant.
- iii. Reactants: The reactants used in the assessment of oxidation and reduction potential of the test substance will vary depending on the physical state and intended uses of the test substance. Appropriate reactants will be selected based on knowledge of the test substance and its intended uses supplied by the Sponsor. Examples of reactants include: water; carbon dioxide and/or monoammonium phosphate, or other compounds commonly used as fire extinguishing agents; elemental zinc or iron, or other moderately strong reducing agents; a moderately strong oxidizing agent which may come in contact with the test substance during its intended use; and, if intended for use in households, a household organic solvent such as kerosene, turpentine, or gasoline.

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B. EXPERIMENTAL DESIGN (cont.)

1. Oxidation/Reduction: Chemical Incompatibility (830.6314) (cont.)

- c. Reporting: Discussion and conclusions about the oxidation or reduction potential of the test substance will be reported. Results of any testing, including significant temperature increases, will also be presented in the report.

2. Explodability (830.6316)

- a. Method: An ASTM method will be used with differential scanning calorimetry (DSC) for liquid test substances.
- b. Procedures: The boiling point of the liquid sample will be determined or known before the explodability can be determined. A small weighed sample will be placed in a tared metal boat and the top of the boat will be crimped. The sample will be placed in the DSC along with an appropriate inactive reference material, and both will be heated from ambient temperature to 400°C or 50°C less than the samples boiling point, whichever is lower. The DSC will be read for a spike showing a release of energy, which would indicate an explosion. If necessary to observe the full curve, the temperature may be extended.
- c. Reproducibility: At least two additional determinations will be made.
- d. Reporting: The readings will be averaged and reported as °C.

3. Test Substance Accountability:

A comprehensive inventory of test substance received and used will be kept. The test substance container(s) will be weighed when received at this facility and a record of all test substance use will be maintained. Test substance will be stored in the original containers, or in the equivalent thereof, or in glass containers with polyethylene screw-type caps.

4. Disposal of Unused Test Substance:

Unused test substance will be disposed of at Sponsor's expense after termination of the study.

5. Safety Precautions:

General safety precautions as required by laboratory SOPs will be followed. The Sponsor will supply basic toxicity data on the test substance to be used. However, since the toxicity of test substances is often not well characterized, this laboratory will be conservative in setting safety procedures. The Sponsor or Sponsor's Representative shall be notified of any personnel exposures requiring a physician's examination or care.

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C. DATA MANAGEMENT

1. Records: The following records will be maintained during the study.
 - a. Protocol and Protocol Amendments (if any).
 - b. Final report and amendments (if any).
 - c. Study correspondence and information supplied by the Sponsor.
 - d. Test substance receipts and identification as supplied by Sponsor.
 - e. Test substance preparation, storage and/or disposition.
 - f. Experimental methods.
 - g. Results obtained from testing.
 - h. Study duration, temperature, and other conditions, if applicable.
 - i. Other pertinent data.
2. Data Storage: All raw data, original protocol, original final report, any amendment(s), and a retained test substance sample will be archived at STILLMEADOW, Inc. for a period of 15 years.
3. Data Reporting: The final report will include all data as described in the Good Laboratory Practice Standards, including:
 - a. Statement from the Quality Assurance Unit.
 - b. Signature of the Study Director.
 - c. A GLP Compliance Statement signed by the Study Director.
 - d. Names of scientific personnel involved in the study.
 - e. Dates of study initiation and termination.
 - f. Identification, label information, description, preparation and storage of the test substance.
 - g. Description of the test procedures.
 - h. Study results.
 - i. Study duration, temperature, and other conditions, if applicable.
 - j. Conclusions concerning the physical and chemical characteristics of the test substance, if possible.
 - k. A copy of this Protocol.
 - l. Any protocol deviations and the impact, if any, on the study.
4. Report Generation: A final report will be generated after completion of the laboratory portion of the study.